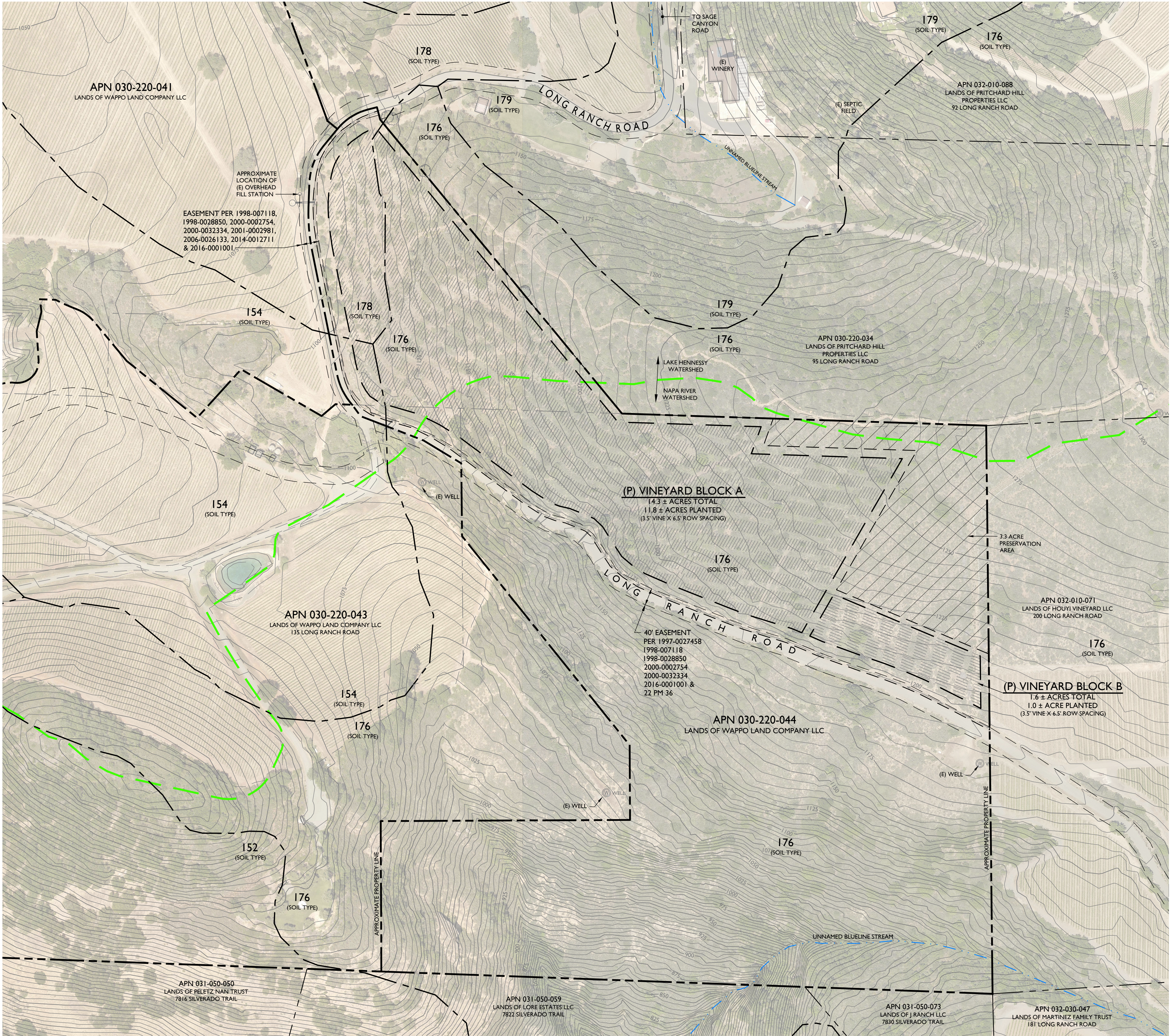


WAPPO LAND COMPANY LLC

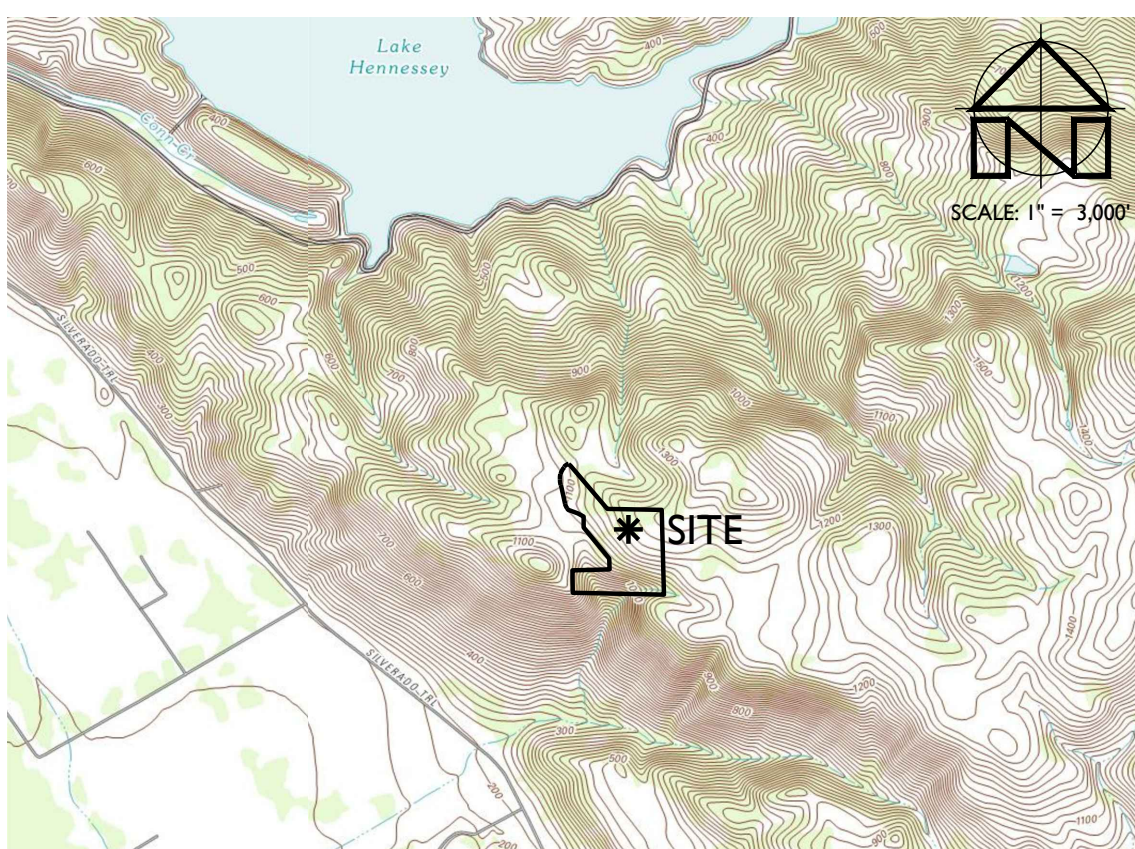
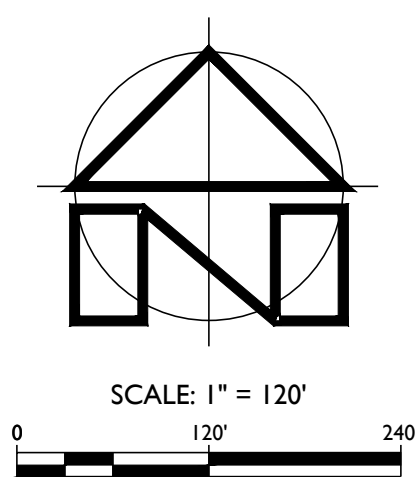
VINEYARD DEVELOPMENT EROSION CONTROL PLAN

EXHIBIT A-1



OVERALL SITE PLAN

SCALE: 1" = 120'



LOCATION MAP

SCALE: 1" = 3,000'

PROJECT INFORMATION:

PROPERTY OWNER & APPLICANT:
WAPPO LAND COMPANY LLC
141 LONG RANCH ROAD
SAINT HELENA, CA 94574
SITE ADDRESS:
LONG RANCH ROAD
SAINT HELENA, CA 94574
ASSESSOR'S PARCEL NUMBER:
030-220-044
PARCEL SIZE:
41.8 ± ACRES
PROJECT SIZE:
16 ± ACRES (12.8 ± ACRES PLANTED)
0.4 ± ACRES ADDITIONAL FOR
TEMPORARY DISTURBANCE
ZONING:
AGRICULTURAL WATERSHED (AW)

NOTES:

- C1 OVERALL SITE PLAN
- C2 NOTES, ABBREVIATIONS AND LEGEND
- C3 EROSION CONTROL PLAN
- C4 FENCING PLAN
- C5 DETAILS

PROJECT DESCRIPTION:

THE PURPOSE OF THIS PROJECT IS TO DEVELOP NEW VINEYARD ON SUBJECT PARCEL.

FLOOD HAZARD NOTE:

ACCORDING TO THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA) FLOOD INSURANCE RATE MAP (FIRM) MAP NUMBER 06055C0405E, EFFECTIVE SEPTEMBER 26, 2008, THE PROJECT SITE IS NOT LOCATED IN A SPECIAL FLOOD HAZARD AREA.

SOIL TYPE LEGEND:

- 152 HAMBRIGHT ROCK-OUTCROP COMPLEX, 30 TO 75 PERCENT SLOPES
- 154 HENNEKE GRAVELLY LOAM, 30 TO 75 PERCENT SLOPES
- 176 ROCK OUTCROP-HAMBRIGHT COMPLEX, 50 TO 75 PERCENT SLOPES
- 178 SOBRANTE LOAM, 5 TO 30 PERCENT SLOPES
- 179 SOBRANTE LOAM, 30 TO 50 PERCENT SLOPES

SOIL TYPE BOUNDARIES SHOWN ON THIS MAP ARE BASED ON THE NAPA COUNTY GEOGRAPHIC INFORMATION SYSTEM DATA.

LEGEND:

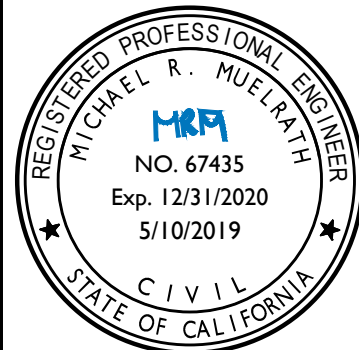
- APPROXIMATE PROPERTY LINE
- WATERSHED BOUNDARY
- SOIL TYPE BOUNDARY
- BLUELINE STREAM
- VINEYARD BLOCK

NOTE:

ALL EROSION CONTROL MATERIALS SHALL BE FREE OF PLASTIC MONOFILAMENT SO THAT SMALL WILDLIFE WILL NOT BECOME ENTANGLED.



PREPARED UNDER THE DIRECTION OF:



DRAWN BY: PowerCAD

CHECKED BY: MRM

DATE: MAY 10, 2019

REVISIONS: BY:
1/7/2019 PLAN CHECK SUBMITTAL YMS
5/10/2019 PLAN CHECK RESPONSE YMS

JOB NUMBER: 08-152

FILE: 08-152ECP.DWG

ORIGINAL SIZE: 24" X 36"

SHEET NUMBER:

C1 OF

GENERAL NOTES:

- THESE DRAWINGS WERE DEVELOPED EXCLUSIVELY FOR THIS PROJECT AND ARE NOT TO BE REPRODUCED OR USED FOR ANY OTHER PROJECT WITHOUT THE WRITTEN PERMISSION OF APPLIED CIVIL ENGINEERING INCORPORATED.
- ALL MATERIALS AND WORKMANSHIP FOR THE WORK DESCRIBED ON THESE PLANS SHALL CONFORM TO THE LATEST EDITIONS OF THE FOLLOWING STANDARDS AS ADOPTED AND AMENDED BY NAPA COUNTY:
 - CALIFORNIA BUILDING CODE (2016)
 - CALIFORNIA ELECTRIC CODE (2016)
 - CALIFORNIA PLUMBING CODE (2016)
 - CALIFORNIA MECHANICAL CODE (2016)
 - CALIFORNIA FIRE CODE (2016)
 - CALIFORNIA DEPARTMENT OF TRANSPORTATION (2018)
 - NAPA COUNTY CODE (CURRENT)

CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR BEING FAMILIAR WITH ALL STANDARDS, CODES AND REGULATIONS APPLICABLE TO THIS PROJECT.

- CONTRACTOR SHALL BE APPROPRIATELY LICENSED WITH THE STATE OF CALIFORNIA TO PERFORM THE WORK SHOWN ON THESE PLANS.
- CONTRACTOR SHALL SUPPLY ALL MATERIALS, EQUIPMENT AND LABOR NECESSARY TO CONSTRUCT THE IMPROVEMENTS ILLUSTRATED ON THESE PLANS.
- CONTRACTOR SHALL PROVIDE SUBMITTALS FOR ALL MATERIALS AND PRODUCTS TO BE USED FOR THE SITE IMPROVEMENTS TO APPLIED CIVIL ENGINEERING INCORPORATED FOR REVIEW AND APPROVAL.
- THE IMPROVEMENTS SHOWN ON THESE PLANS REQUIRE INSPECTION BY THE NAPA COUNTY PLANNING, BUILDING AND ENVIRONMENTAL SERVICES DEPARTMENT. CONTRACTOR IS RESPONSIBLE FOR SCHEDULING ALL INSPECTIONS.
- CONTRACTOR SHALL SCHEDULE A PRECONSTRUCTION MEETING WITH APPLIED CIVIL ENGINEERING INCORPORATED AND NAPA COUNTY AT LEAST ONE WEEK PRIOR TO THE COMMENCEMENT OF CONSTRUCTION TO REVIEW THE PROJECT PLANS AND SPECIFICATIONS AND NAPA COUNTY REQUIREMENTS.
- CONTRACTOR IS RESPONSIBLE FOR SECURING ALL CONSTRUCTION RELATED PERMITS FROM THE GOVERNING AGENCIES AND MAINTAINING A COPY OF THE PERMITS AND THE APPROVED PLANS ON THE JOB SITE AT ALL TIMES.
- THE PROPERTY OWNER AND CONTRACTOR ARE RESPONSIBLE FOR OBTAINING ALL APPROPRIATE PERMITS FOR WORK WITHIN ANY RIPARIAN AREA PRIOR TO COMMENCING WORK IN THAT AREA.
- CONTRACTOR IS SOLELY RESPONSIBLE FOR JOB SITE CONDITIONS AND THE SAFETY OF PROPERTY AND PEOPLE ON THE JOB SITE AT ALL TIMES. CONTRACTOR SHALL MAINTAIN THE JOB SITE IN A SAFE CONDITION, IN ACCORDANCE WITH FEDERAL, STATE AND LOCAL REQUIREMENTS, AT ALL TIMES, INCLUDING OUTSIDE OF NORMAL WORKING HOURS. CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE OWNER AND ENGINEER HARMLESS FROM ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THE PROJECT, EXCEPT LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER OR THE ENGINEER.
- CONTRACTOR SHALL PROVIDE AND MAINTAIN BARRICADES TO PROVIDE FOR THE SAFETY OF THE GENERAL PUBLIC TO THE SATISFACTION OF NAPA COUNTY AND THE OWNER.
- THESE PLANS ARE INTENDED TO PROVIDE HORIZONTAL AND VERTICAL CONTROL FOR THE PROPOSED SITE IMPROVEMENTS SHOWN HEREON.
- ALL DIMENSIONS SHOWN ON THESE PLANS SHOW MEASUREMENTS IN A HORIZONTAL PLANE UNLESS OTHERWISE SPECIFIED.
- ALL WRITTEN DIMENSIONS SUPERCEDE ANY SCALED DIMENSIONS. IF AN APPARENT DISCREPANCY IS IDENTIFIED CONTACT APPLIED CIVIL ENGINEERING INCORPORATED IMMEDIATELY FOR A WRITTEN CLARIFICATION.
- IF ANY CONTRACTOR, SUBCONTRACTOR, OR SURVEYOR IDENTIFIES ANY OMISSIONS, DEFICIENCIES, CONFLICTS OR ERRORS IN THESE PLANS AND SPECIFICATIONS OR IF THERE IS ANY DOUBT AS TO THEIR MEANING OR INTENT, THEY SHALL CONTACT APPLIED CIVIL ENGINEERING INCORPORATED FOR A WRITTEN ADDENDUM OR CLARIFICATION. CONTRACTOR IS NOT ELIGIBLE FOR ADDITIONAL COMPENSATION IF THEY FAIL TO DO SO BEFORE PROVIDING A PROPOSAL.
- CONTRACTOR IS TO PROTECT ALL EXISTING SITE IMPROVEMENTS, UTILITIES, BUILDINGS AND NATURAL FEATURES FROM DAMAGE THROUGHOUT THE DURATION OF CONSTRUCTION. ANY DAMAGE CAUSED BY CONTRACTOR SHALL BE REPAIRED AT CONTRACTOR'S EXPENSE.
- IN THE EVENT THAT ARCHEOLOGICAL ARTIFACTS OR HUMAN REMAINS ARE DISCOVERED DURING CONSTRUCTION, WORK SHALL CEASE IN A 50-FOOT RADIUS SURROUNDING THE AREA OF DISCOVERY. THE PERMITTEE SHALL CONTACT NAPA COUNTY PLANNING BUILDING AND ENVIRONMENTAL SERVICES DEPARTMENT AT (707) 253-4417 FOR FURTHER GUIDANCE, WHICH WILL LIKELY INCLUDE THE REQUIREMENT FOR THE PERMITTEE TO HIRE A QUALIFIED PROFESSIONAL TO ANALYZE THE ARTIFACTS ENCOUNTERED AND TO DETERMINE IF ADDITIONAL MEASURES ARE REQUIRED.

IF HUMAN REMAINS ARE ENCOUNTERED DURING THE DEVELOPMENT, ALL WORK IN THE VICINITY MUST BE, BY LAW, HALTED, AND THE NAPA COUNTY CORONER INFORMED, SO THAT THE CORONER CAN DETERMINE IF AN INVESTIGATION OF THE CAUSE OF DEATH IS REQUIRED, AND IF THE REMAINS ARE OF NATIVE AMERICAN ORIGIN. IF THE REMAINS ARE OF NATIVE AMERICAN ORIGIN, THE NEAREST TRIBAL RELATIVES AS DETERMINED BY THE STATE NATIVE AMERICAN HERITAGE COMMISSION SHALL BE CONTACTED BY THE PERMITTEE TO OBTAIN RECOMMENDATIONS FOR TREATING OR REMOVAL OF SUCH REMAINS, INCLUDING GRAVE GOODS, WITH APPROPRIATE DIGNITY, AS REQUIRED UNDER PUBLIC RESOURCES CODE SECTION 5097.98.

SURVEY NOTES:

- FADED BACKGROUND REPRESENTS EXISTING TOPOGRAPHIC FEATURES. TOPOGRAPHIC INFORMATION WAS TAKEN FROM THE NAPA COUNTY GEOGRAPHIC INFORMATION SYSTEM DATABASE. APPLIED CIVIL ENGINEERING INCORPORATED ASSUMES NO LIABILITY REGARDING THE ACCURACY OR COMPLETENESS OF THE TOPOGRAPHIC INFORMATION.
- AERIAL PHOTOGRAPHS WERE OBTAINED FROM THE NAPA COUNTY GEOGRAPHIC INFORMATION SYSTEM (GIS) DATABASE, TAKEN APRIL TO JUNE 2018 AND MAY NOT REPRESENT CURRENT CONDITIONS.
- CONTOUR INTERVAL: FIVE (5) FEET, HIGHLIGHTED EVERY TWENTY FIVE (25) FEET.
- BENCHMARK: NAVD 88
- THE PROPERTY LINES SHOWN ON THESE PLANS DO NOT REPRESENT A BOUNDARY SURVEY. THEY ARE APPROXIMATE AND ARE PROVIDED FOR INFORMATIONAL PURPOSES ONLY.
- CONTRACTOR SHALL PRESERVE ALL EXISTING MONUMENTS THROUGHOUT THE DURATION OF CONSTRUCTION OR HAVE THEM REPLACED AT THEIR OWN EXPENSE.
- ALL CONSTRUCTION STAKING SHALL BE PERFORMED BY A LICENSED LAND SURVEYOR.

GRADING NOTES:

- ALL EARTHWORK IS TO CONFORM TO THE REQUIREMENTS OF THE CALIFORNIA BUILDING CODE, NAPA COUNTY CONSERVATION REGULATIONS AND THE NAPA COUNTY PLANNING, BUILDING AND ENVIRONMENTAL SERVICES DEPARTMENT - ENGINEERING DIVISION STANDARDS.
- ALL CUT AND FILL SLOPES SHALL BE NO STEEPER THAN 2:1 UNLESS OTHERWISE APPROVED BY A GEOTECHNICAL ENGINEER.
- ALL DEBRIS GENERATED DURING DEMOLITION, SITE STRIPPING AND GRADING ACTIVITIES IS TO BE DISPOSED OF PROPERLY OFFSITE BY THE CONTRACTOR.
- CONTRACTOR IS RESPONSIBLE FOR IMPORTING AND / OR EXPORTING MATERIALS AS NECESSARY TO ACHIEVE THE FINISH GRADES ILLUSTRATED ON THESE PLANS.
- CONTRACTOR SHALL CONDUCT ALL GRADING OPERATIONS IN A MANNER THAT PREVENTS WIND BLOWN DIRT AND DUST AND RELATED DAMAGE TO NEIGHBORING PROPERTIES.
- CONTRACTOR SHALL CONFORM TO EXISTING IMPROVEMENTS WITH A SMOOTH TRANSITION TO AVOID ABRUPT CHANGES IN GRADE, LOW SPOTS OR OTHER HAZARDOUS CONDITIONS.
- PROPERTY OWNER SHALL BE RESPONSIBLE FOR MAINTAINING ALL FINISH GRADED SLOPES AFTER THE COMPLETION OF CONSTRUCTION AND REPAIRING ANY EROSION DAMAGE.

EXISTING UTILITY NOTES:

- THE EXISTING UTILITY LOCATIONS SHOWN ON THESE PLANS ARE APPROXIMATE AND FOR INFORMATIONAL PURPOSES ONLY. THEY ARE BASED ON INFORMATION PROVIDED BY THE PROPERTY OWNER, THE SURVEYOR AND THE RESPECTIVE UTILITY COMPANIES. APPLIED CIVIL ENGINEERING INCORPORATED ASSUMES NO LIABILITY REGARDING THE ACCURACY OR THE COMPLETENESS OF THEIR LOCATIONS.
- CONTRACTOR IS RESPONSIBLE FOR VERIFYING EXISTING UTILITY LOCATIONS PRIOR TO ORDERING MATERIALS OR BEGINNING CONSTRUCTION. IF A DISCREPANCY BETWEEN THE PLANNED AND ACTUAL HORIZONTAL OR VERTICAL LOCATION OF AN EXISTING UTILITY EXISTS, CONTACT APPLIED CIVIL ENGINEERING INCORPORATED FOR AN ALTERNATE DESIGN.
- CONTRACTOR SHALL NOTIFY ALL PUBLIC AND PRIVATE UTILITY COMPANIES TWO WORKING DAYS PRIOR TO THE START OF CONSTRUCTION TO MARK THE LOCATION OF EXISTING UTILITY LINES. CALL UNDERGROUND SERVICE ALERT (USA) AT (800) 227-2600.
- EXISTING UTILITIES ARE TO REMAIN IN SERVICE AT ALL TIMES. CONTRACTOR SHALL PROTECT ALL EXISTING UTILITIES PER THE REQUIREMENTS OF THE UTILITY OWNER.
- CONTRACTOR SHALL COORDINATE ANY REQUIRED UTILITY RELOCATIONS WITH THE UTILITY OWNER.

EROSION CONTROL NOTES:

- ALL EROSION CONTROL WORK WILL BE PERFORMED BY THE VINEYARD MANAGER IN ACCORDANCE WITH THIS APPROVED VINEYARD EROSION CONTROL PLAN.
- ALL DISTURBED AREAS MUST BE WINTERIZED BY OCTOBER 15TH OF EACH YEAR THAT THE PROJECT IS UNDER CONSTRUCTION (EXCEPT PORTIONS WITHIN THE LAKE HENNESSEY WATERSHED FOR WHICH EARTH DISTURBING ACTIVITIES SHALL BE COMPLETED BY SEPTEMBER 1ST AND WINTERIZATION SHALL BE COMPLETED BY SEPTEMBER 15TH).
- A REQUEST TO ALLOW GRADING TO EXTEND BEYOND THE GRADING DEADLINES MAY BE GRANTED BY THE NAPA COUNTY PLANNING, BUILDING AND ENVIRONMENTAL SERVICES DEPARTMENT - CONSERVATION DIVISION IF A MAJORITY OF THE GRADING HAS BEEN COMPLETED AND THERE COULD BE A DETRIMENTAL EFFECT ON THE ENVIRONMENT IF THE REMAINING GRADING REMAINS INCOMPLETE. A REQUEST TO ALLOW GRADING TO EXTEND BEYOND THE GRADING DEADLINES MUST BE SUBMITTED IN WRITING TO NAPA COUNTY NO LATER THAN TWO WEEKS BEFORE THE GRADING DEADLINE. GRADING BEYOND THE WINTERIZATION DEADLINE WILL NOT BE ALLOWED PRIOR TO APPROVAL BY NAPA COUNTY.
- ALL PERMANENT DRAINAGE FACILITIES AND SEDIMENT RETENTION STRUCTURES MUST BE INSTALLED BY OCTOBER 1ST (EXCEPT PORTIONS WITHIN THE LAKE HENNESSEY WATERSHED FOR WHICH ALL FACILITIES SHALL BE COMPLETED BY SEPTEMBER 1ST).
- ALL TEMPORARY EROSION AND SEDIMENT CONTROL DEVICES (WATER BARS, SILT FENCE & STRAW WATTLES) MUST BE INSTALLED BY OCTOBER 15TH (EXCEPT PORTIONS WITHIN THE LAKE HENNESSEY WATERSHED FOR WHICH WINTERIZATION SHALL BE COMPLETED BY SEPTEMBER 15TH).
- ALL EROSION CONTROL MEASURES MUST BE INSPECTED AND MAINTAINED BY THE CONTRACTOR THROUGHOUT THE RAINY SEASON. INSPECTIONS MUST BE PERFORMED AT LEAST ONCE PER WEEK DURING EXTENDED DRY PERIODS, IMMEDIATELY BEFORE ANTICIPATED RAIN EVENTS, ONCE EVERY 24 HOURS DURING EXTENDED RAIN EVENTS AND IMMEDIATELY FOLLOWING EACH RAIN EVENT.
- ALL DISTURBED AREAS ARE TO BE STABILIZED BY PLANTING OF AN EROSION CONTROL COVER CROP. PRIOR TO APPLYING THE EROSION CONTROL SEED BLEND, THE SEED BED SHOULD BE PREPARED BY UNIFORMLY SCARIFYING THE GROUND SURFACE TO A DEPTH OF TWO TO FOUR INCHES AND CONDITIONING TO BREAK UP LARGE PEDS.
- THE COVER CROP SEED BLEND SHOULD BE BROADCAST OR DRILLED AFTER THE SEED BED HAS BEEN PREPARED.
- A TEMPORARY TILLED COVER CROP WILL BE ESTABLISHED IN THE VINEYARD BLOCK AREAS FOR THE FIRST THREE YEARS AFTER PLANTING WHILE THE VINEYARD IS GETTING ESTABLISHED. THE TEMPORARY COVER CROP SEED MIX FOR THE VINEYARD ESTABLISHMENT SHOULD BE THE "SOIL BUILDER" AVAILABLE FROM NAPA VALLEY AG SUPPLY APPLIED AT A MINIMUM RATE OF 75 POUNDS PER ACRE:

COMMON VETCH	10%
CALIFORNIA RED OATS	20%
FIELD PEAS	30%
BELL BEANS	40%
- THE PERMANENT COVER CROP SEED MIX FOR ALL NO-TILL VINEYARD BLOCKS AND VINEYARD AVENUES SHOULD BE THE "VINTNER'S BLEND" AVAILABLE FROM NAPA VALLEY AG SUPPLY APPLIED AT A MINIMUM RATE OF 75 POUNDS PER ACRE:

CREeping RED FESCUE	40%
CHEWING FESCUE	25%
DWARF PERENNIAL RYE	25%
ROSE CLOVER	8%
NEW ZEALAND WHITE CLOVER	2%
- ALTERNATE SEED MIX MAY BE USED BY THE VINEYARD MANAGER PROVIDED THAT ATTENTION IS GIVEN TO CHOOSING A COVER CROP THAT IS SUITABLE FOR THE SITE SOIL AND TOPOGRAPHIC CONDITIONS. ANY ALTERNATE SEED MIX MUST BE APPROVED BY THE ENGINEER AND THE NAPA COUNTY RESOURCE CONSERVATION DISTRICT PRIOR TO USE.
- ALL SEEDED AREAS ARE TO BE FERTILIZED TO PROMOTE SUCCESSFUL ESTABLISHMENT OF THE COVER CROP. THE RECOMMENDED FERTILIZER IS AMMONIUM PHOSPHATE (16-20-0) APPLIED AT A RATE OF 250 POUNDS PER ACRE.
- ADDITIONAL SOIL AMENDMENTS WILL BE ADDED BASED ON FUTURE SOILS TESTING REPORTS BY OTHERS. TYPICAL AMENDMENTS INCLUDE: COMPOSTED ORGANIC MATTER, LIME AND / OR GYPSUM. THE AMENDMENTS SHOULD BE INCORPORATED DURING THE LAND PREPARATION PROCESS TO INCREASE SOIL NUTRIENT CONTENT AND AVAILABILITY, AND TO IMPROVE SOIL STRUCTURE AND WATER HOLDING CAPACITY.
- AFTER THE SEED AND FERTILIZER HAVE BEEN PLACED THE SEEDED AREA SHOULD BE RAKED, DRAGGED OR HARROWED TO ENSURE THAT SEEDS ARE PROPERLY BEDDED.
- ALL DISTURBED AREAS ARE TO BE MULCHED WITH STRAW AT A RATE OF 3,000 POUNDS PER ACRE TO PROTECT THE BARE SOILS WHILE THE COVER CROP IS GETTING ESTABLISHED.
- STRAW SHOULD BE SPREAD BY HAND IN A MANNER THAT PROMOTES FORMATION OF AN INTERWOVEN MATRIX. CRIMPING STRAW INTO THE SOIL IS HIGHLY RECOMMENDED ON ESPECIALLY WINDY SITES AND IS MANDATORY ON SITES WHERE STRAW IS MECHANICALLY CHOPPED AND BLOWN INTO PLACE.
- ALL SOIL CUT AND FILL SLOPES THAT ARE STEEPER THAN 3:1 (HORIZONTAL TO VERTICAL) MUST BE COVERED WITH NORTH AMERICAN GREEN C125BN EROSION CONTROL BLANKET AFTER THE EROSION CONTROL SEED AND FERTILIZER HAVE BEEN PLACED.
- CONTRACTOR MUST MAINTAIN AN ADEQUATE SUPPLY OF EROSION CONTROL MATERIALS ONSITE TO FACILITATE MAINTENANCE AND REPAIR THROUGHOUT THE RAINY SEASON. TYPICAL MATERIALS THAT SHOULD BE KEPT ONSITE INCLUDE SILT FENCE AND STRAW WATTLE SEDIMENT BARRIERS, GRAVEL BAGS, EROSION CONTROL BLANKETS, STRAW AND EROSION CONTROL SEED MIX.
- ESTABLISHING AN EFFECTIVE VEGETATIVE COVER CROP WILL BE THE PRIMARY MEANS OF PREVENTING EROSION FROM THE PROPOSED VINEYARD DEVELOPMENT AREA. AFTER THE INITIAL LAND PREPARATION ACTIVITIES ARE COMPLETE A TEMPORARY COVER CROP WILL BE PLANTED AND STRAW MULCH WILL BE APPLIED THROUGHOUT THE CLEARED AREA TO STABILIZE THE PROJECT AREAS THROUGH THE WINTER. A MINIMUM COVERAGE OF 80% IS REQUIRED TO MAINTAIN EROSION RATES AT ACCEPTABLE LEVELS.
- THE TEMPORARY COVER CROP WILL BE TILLED IN THE SPRING DURING THE INITIAL VINEYARD ESTABLISHMENT PERIOD (UP TO THE FIRST THREE YEARS). THE TILLED AREAS AND ANY OTHER DISTURBED AREAS OR AREAS WITH LESS THAN ADEQUATE COVER WILL ALSO BE MULCHED EACH YEAR IN THE FALL TO PROTECT THE BARE SOIL WHILE THE COVER CROP IS GETTING ESTABLISHED.
- AFTER THE VINEYARD ESTABLISHMENT PERIOD ALL VINEYARD BLOCKS WILL BE CONVERTED TO A NO-TILL REGIME. THE NO-TILL COVER CROP WILL BE MOWED IN THE SPRING AND WILL BE RESEEDD AND MULCHED IN THE FALL AS NECESSARY TO ACHIEVE THE SPECIFIED 80% COVER.
- ALL VINEYARD AVENUES WILL BE PROTECTED WITH A PERMANENT NO-TILL COVER CROP WITH DENSITIES MAINTAINED AT 80% OR MORE THROUGHOUT THE RAINY SEASON. VINEYARD AVENUES SHALL NOT BE TILLED.

ENVIRONMENTAL COMMITMENTS:

IN ORDER TO MINIMIZE THE IMPACTS TO THE IMMEDIATE AND SURROUNDING ENVIRONMENT, THE PROJECT PROPOSES THE FOLLOWING MEASURES:

ARCHEOLOGY:

- ALL WORK IS TO CEASE IF ARCHEOLOGICAL, CULTURAL, OR HISTORICAL RESOURCES ARE DISCOVERED DURING CONSTRUCTION. IF SUCH RESOURCES ARE DISCOVERED, THE NAPA COUNTY CONSERVATION, DEVELOPMENT AND PLANNING DEPARTMENT SHALL BE CONTACTED AT (707) 253-4417 AND AN APPROPRIATE COURSE OF ACTION WILL BE DEVELOPED.

AIR QUALITY:

- WOODY VEGETATION CLEARED FROM THE DEVELOPMENT AREA WILL BE CHIPPED OR USED OR DISPOSED OF IN ANOTHER APPROVED MANNER TO AVOID BURNING IN LARGE PILES.
- ALL EXPOSED SOIL STOCKPILES SHALL BE COVERED.
- DISTURBED AREAS WILL BE SEEDED AND MULCHED AS SOON AS POSSIBLE.
- ALL TRUCKS HAULING SOIL, SAND AND OTHER LOOSE MATERIALS SHALL BE COVERED OR ALL TRUCKS SHALL MAINTAIN AT LEAST TWO FEET OF FREEBOARD (I.E. THE MINIMUM REQUIRED SPACE BETWEEN THE TOP OF THE LOAD AND THE TOP OF THE TRAILER) IN ACCORDANCE WITH SECTION 23114 OF THE CALIFORNIA VEHICLE CODE DURING TRANSIT TO AND FROM THE SITE.
- THE DRIVEWAY AND SITE ACCESS SHALL BE SWEPT DAILY (PREFERABLY WITH WATER SWEEPERS), IF VISIBLE SOIL MATERIAL IS CARRIED ONTO THE DRIVEWAY AND STREET.
- TRAFFIC ON UNPAVED AREAS AND ROADS SHALL BE LIMITED TO 15 MILES PER HOUR (MPH).
- GRADING AND EARTHMOVING ACTIVITIES SHALL BE SUSPENDED WHEN WINDS EXCEED 25 MPH.
- EXTENDED PERIODS OF CONSTRUCTION EQUIPMENT ENGINE IDLING WILL BE AVOIDED TO THE MAXIMUM EXTENT FEASIBLE.
- CONSTRUCTION EQUIPMENT WILL BE MAINTAINED IN ACCORDANCE WITH MANUFACTURERS' SPECIFICATIONS.

NOISE:

- ROCK BLASTING, IF REQUIRED WILL BE PERFORMED IN ISOLATED AREAS AND WILL BE SCHEDULED TO OCCUR BETWEEN THE HOURS OF 10:00 A.M. AND 2:00 P.M.

BIOLOGY:

- THE OWNER/APPLICANT SHALL INCLUDE AS PART OF THIS EROSION CONTROL PLAN THE FOLLOWING MEASURES TO MINIMIZE IMPACTS ASSOCIATED WITH THE LOSS AND DISTURBANCE OF PASSERINE BIRD AND RAPTOR SPECIES CONSISTENT WITH AND PURSUANT TO CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE (DFW) CODE SECTIONS 3503 AND 3503.5:
 - FOR EARTH-DISTURBING ACTIVITIES OCCURRING BETWEEN FEBRUARY 1 AND AUGUST 31, (WHICH COINCIDES WITH THE GRADING SEASON OF APRIL 1 THROUGH OCTOBER 15 – NCC SECTION 18.108.070L, AND BIRD BREEDING AND NESTING SEASONS), A QUALIFIED WILDLIFE BIOLOGIST SHALL CONDUCT PRECONSTRUCTION SURVEYS FOR RAPTOR AND PASSERINE BIRD COURSHIP ACTIVITIES AND/OR THEIR NESTS WITHIN A 300-FOOT RADIUS OF EARTHMOVING ACTIVITIES. THE PRECONSTRUCTION SURVEY SHALL BE CONDUCTED NO MORE THAN 14 DAYS PRIOR TO VEGETATION REMOVAL AND GROUND DISTURBING ACTIVITIES ARE TO COMMENCE (SURVEYS SHOULD BE CONDUCTED A MINIMUM OF 3 SEPARATE DAYS DURING THE 14 DAYS PRIOR TO DISTURBANCE). A COPY OF THE SURVEY WILL BE PROVIDED TO THE COUNTY CONSERVATION DIVISION AND THE DFW PRIOR TO COMMENCEMENT OF WORK.
 - IN THE EVENT THAT NESTING RAPTORS AND/OR BIRDS ARE FOUND DURING PRECONSTRUCTION SURVEYS, THE PROPERTY OWNER SHALL CONSULT WITH DFW AND OBTAIN APPROVAL FOR SPECIFIC NEST-PROTECTION BUFFERS AS APPROPRIATE BASED ON SPECIES FOUND PRIOR TO COMMENCEMENT OF GROUND-BREAKING ACTIVITIES: GENERALLY A MINIMUM 150-FOOT NO-DISTURBANCE BUFFER WILL BE CREATED AROUND ALL ACTIVE PASSERINE BIRD NESTS AND A MINIMUM 300-FOOT BUFFER SHALL BE CREATED AROUND ALL ACTIVE RAPTOR NESTS DURING THE BREEDING AND NESTING SEASON OR UNTIL IT IS DETERMINED BY A QUALIFIED BIOLOGIST THAT ALL YOUNG HAVE FLEDGED. ALL NEST PROTECTION MEASURES SHALL APPLY TO OFF-SITE ACTIVE NESTS THAT ARE LOCATED WITHIN 300 FEET OF PROJECT ACTIVITIES. THESE BUFFER ZONES MAY BE MODIFIED IN COORDINATION WITH DFW BASED ON EXISTING CONDITIONS AT THE PROJECT SITE. BUFFER ZONES SHALL BE FENCED WITH TEMPORARY CONSTRUCTION FENCING AND REMAIN IN PLACE UNTIL THE END OF THE BREADING SEASON OR UNTIL YOUNG HAVE FLEDGED.
 - IF A 15 DAY OR GREATER LAPSE OF PROJECT-RELATED WORK OCCURS DURING THE BREEDING SEASON, ANOTHER BIRD AND RAPTOR PRE-CONSTRUCTION SURVEY AND CONSULTATION WITH DFW WILL BE REQUIRED BEFORE PROJECT WORK CAN BE REINITIATED
- THE OWNER/APPLICANT SHALL INCLUDE AS PART OF THIS EROSION CONTROL PLAN THE FOLLOWING MEASURES TO REDUCE IMPACTS TO SPECIAL-STATUS BAT SPECIES:
 - A QUALIFIED BIOLOGIST SHALL CONDUCT A HABITAT ASSESSMENT FOR POTENTIAL SUITABLE SPECIAL-STATUS BAT HABITAT/TREES WITHIN 14 DAYS OF PROJECT INITIATION.
 - IF THE HABITAT ASSESSMENT REVEALS SUITABLE SPECIAL-STATUS BAT HABITAT AND/OR HABITAT TREES, THE QUALIFIED BIOLOGIST SHALL SUBMIT AN AVOIDANCE PLAN TO THE COUNTY AND CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE (DFW) FOR APPROVAL. THE AVOIDANCE PLAN SHALL IDENTIFY AND EVALUATE THE TYPE OF HABITAT PRESENT AT THE PROJECT SITE AND DETAIL HABITAT AND/OR HABITAT TREE REMOVAL. BAT HABITAT/TREE REMOVAL SHALL OCCUR IN TWO PHASES CONDUCTED OVER TWO DAYS UNDER THE SUPERVISION OF A QUALIFIED BIOLOGIST: DAY ONE IN THE AFTERNOON LIMBS AND BRANCHES OF HABITAT TREES WITHOUT CAVITIES, CREVICES AND DEEP BARK FISSURES WOULD BE REMOVED BY CHAINSAW (LIMBS WITH CAVITIES, CREVICES AND DEEP BARK FISSURES WOULD BE AVOIDED); DAY TWO THE ENTIRE TREE CAN BE REMOVED. IN THE EVENT THE BAT AVOIDANCE MEASURES REQUIRED BY DFW RESULT IN A REDUCTION OR MODIFICATION OF VINEYARD BLOCK BOUNDARIES, THE EROSION CONTROL PLAN SHALL BE REVISED BY THE APPLICANT/ENGINEER AND SUBMITTED TO THE COUNTY.

ABBREVIATIONS:

AB	AGGREGATE BASE	OD	OUTSIDE DIAMETER
AC	ASPHALT CONCRETE	OG	ORIGINAL GRADE
AD	AREA DRAIN	(P)	PROPOSED
AP	ANGLE POINT	PC	POINT OF CURVATURE
BTM	BOTTOM	PCC	PORTLAND CEMENT CONCRETE
CONF	CONFORM	PL	PROPERTY LINE
CONP	CONTROL POINT	PT	POINT OF TANGENCY
CP	DOUBLE CHECK VALVE	PVC	POLYVINYL CHLORIDE
DCV	DROP INLET	PV	PROCESS WASTE
DI	DOWN SPOUT	PWCO	PROCESS WASTE CLEANOUT
DS	EXISTING	RSV	RECIRCULATING SPLITTER VALVE
(E)	END CURVE	SAD	SEE ARCHITECTURAL DRAWINGS
EC	ELEVATION	SD	STORM DRAIN
EP	EDGE OF PAVEMENT	SDCO	STORM DRAIN CLEANOUT
EOC	EDGE OF CONCRETE	SDMH	STORM DRAIN MANHOLE
(F)	FUTURE	SED	SEE ELECTRICAL DRAWINGS
FDC	FIRE DEPARTMENT CONNECTION	SF	SQUARE FEET
FF	FINISH FLOOR	SLDR	SHOULDER
FG	FINISH GRADE	SLD	SEE LANDSCAPE DRAWINGS
FH	FIRE HYDRANT	SMD	SEE MECHANICAL DRAWINGS
FL	FLOW LINE	SPD	SEE PLUMBING DRAWINGS
FS	FINISH SURFACE	SSD	SEE STRUCTURAL DRAWINGS
FSR	FIRE SPRINKLER RISER	SS	SANITARY SEWER
GB	GRADE BREAK	SSCO	SANITARY SEWER CLEANOUT
GM	GAS METER	SSMH	SANITARY SEWER MANHOLE
HP	HIGH POINT	TC	TOP FACE OF CURB
INV	INVERT	TW	TOP OF WALL
IPS	IRON PIPE SIZE	TYP	TYPICAL
IRR	IRRIGATION	WM	WATER METER
LF	LINEAR FEET	WV	WATER VALVE
LP	LOW POINT	XFMR	TRANSFORMER
OC	ON CENTER		

PREPARED UNDER THE DIRECTION OF:



DRAWN BY:
PowerCAD

CHECKED BY:
MRM

DATE:
MAY 10, 2019

REVISIONS: BY:
1/7/2019 PLAN CHECK YMS
SUBMITTAL
5/10/2019 PLAN CHECK YMS
RESPONSE

JOB NUMBER:
08-152

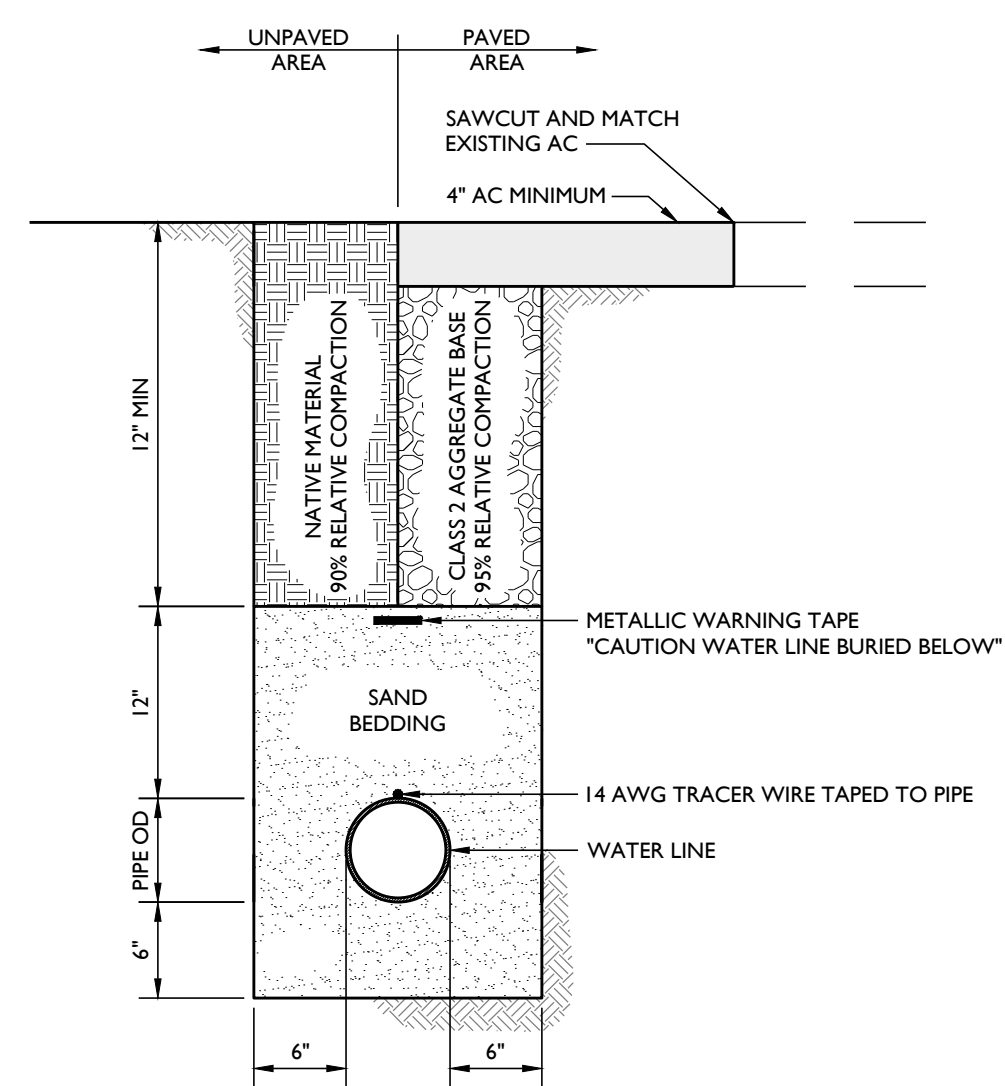
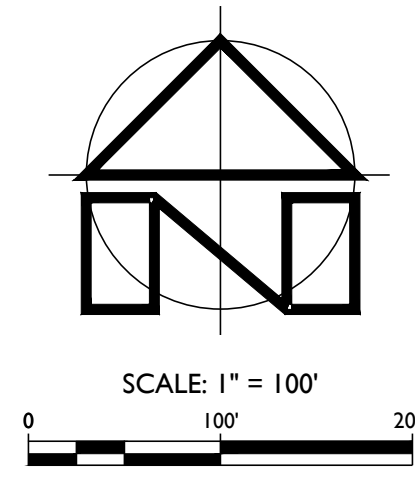
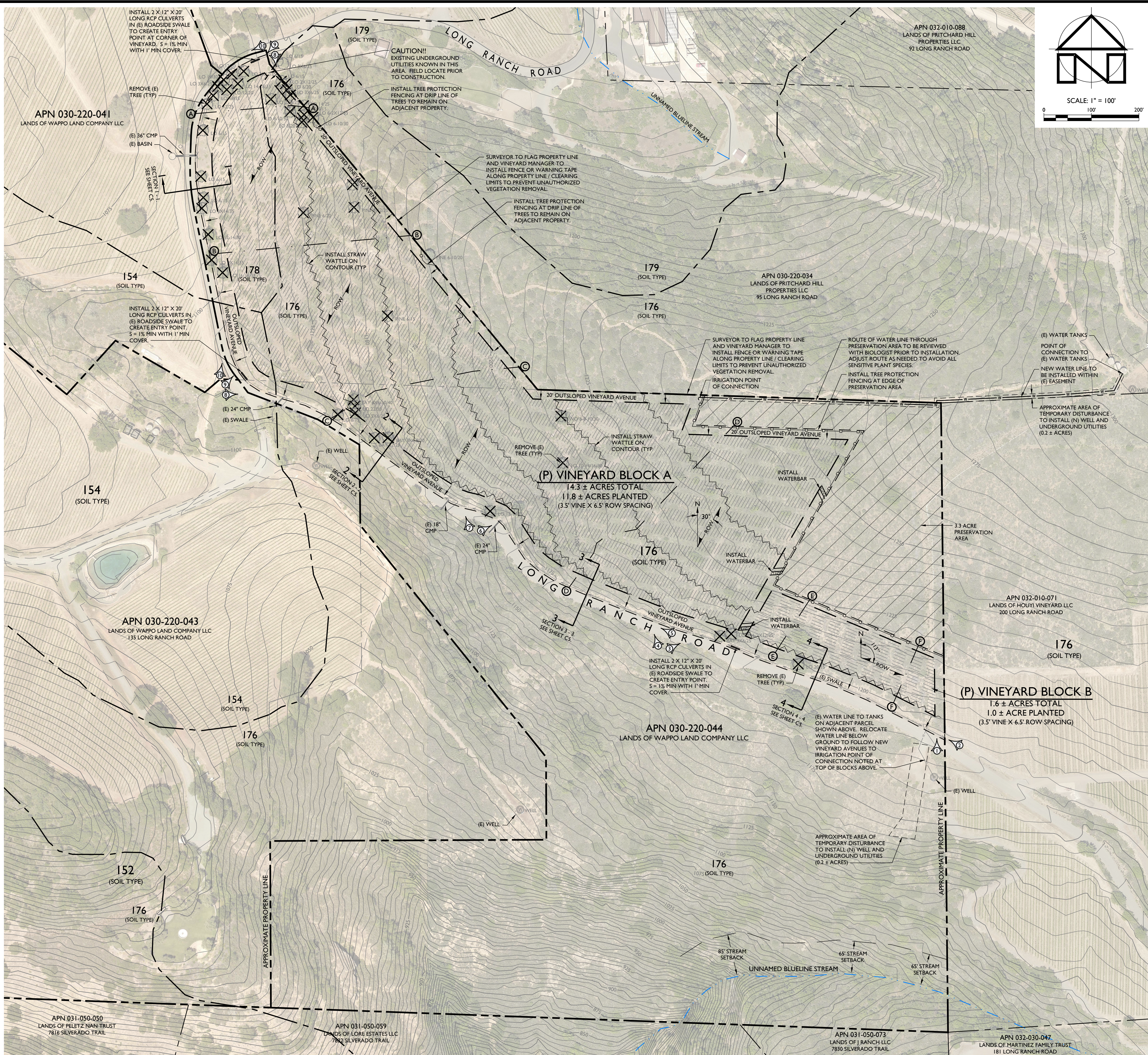
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08-152ECP.DWG

ORIGINAL SIZE:
24" X 36"

SHEET NUMBER:

C2

OF



WATER TRENCH DETAIL

SLOPE SECTIONS	
A - A	18%
B - B	19%
C - C	21%
D - D	13%
E - E	18%
F - F	13%
AVERAGE	17%

SOIL TYPE LEGEND:	
152	HAMBRIGHT ROCK-OUTCROP COMPLEX, 30 TO 75 PERCENT SLOPES
154	HENNEKE GRAVELLY LOAM, 30 TO 75 PERCENT SLOPES
176	ROCK OUTCROP-HAMBRIGHT COMPLEX, 50 TO 75 PERCENT SLOPES
178	SOBRANTE LOAM, 5 TO 30 PERCENT SLOPES
179	SOBRANTE LOAM, 30 TO 50 PERCENT SLOPES

SOIL TYPE BOUNDARIES SHOWN ON THIS MAP ARE BASED ON THE NAPA COUNTY GEOGRAPHIC INFORMATION SYSTEM DATA.

LEGEND:	
	APPROXIMATE PROPERTY LINE
	VINEYARD CLEARING LIMITS / VINEYARD AVENUE
	LIMIT OF VINEYARD BLOCK
	VINE ROWS & ROW DIRECTION
	BLUELINE STREAM
	STRAW WATTLE SEDIMENT BARRIER
	TREE PROTECTION FENCING
	SLOPE SECTION. SEE TABLE, THIS SHEET.
	WATERBAR
	ROCK ENERGY DISSIPATOR
	PHOTO LOCATION AND DIRECTION

- NOTES:
- CLEAN AND MAINTAIN ENTRANCE AND OUTFALLS OF ALL EXISTING CULVERTS ALONG LONG RANCH ROAD.
 - MAINTAIN EXISTING ROADSIDE SWALE ALONG LONG RANCH ROAD. ARMOR ANY AREAS NOT ALREADY PROTECTED WITH ROCK WITH NEW 4" Ø ROCK COBBLE.
 - TRACK WALK ENTIRE DISTURBED AREA. SEE SURFACE ROUGHENING DETAIL, SHEET C4.

SITE PHOTOGRAPH NOTES:

Ⓜ REPRESENTS APPROXIMATE LOCATION AND DIRECTION OF PHOTOGRAPH TAKEN BY APPLIED CIVIL ENGINEERING INCORPORATED ON DECEMBER 10, 2018. REFER TO THE PHOTOGRAPHIC DOCUMENTATION OF EXISTING SITE CONDITIONS FOR THE WAPPO LAND COMPANY LLC VINEYARD EROSION CONTROL PLAN FOR PHOTOGRAPHS AND DESCRIPTIONS.

EROSION CONTROL PLAN
SCALE: 1" = 100'

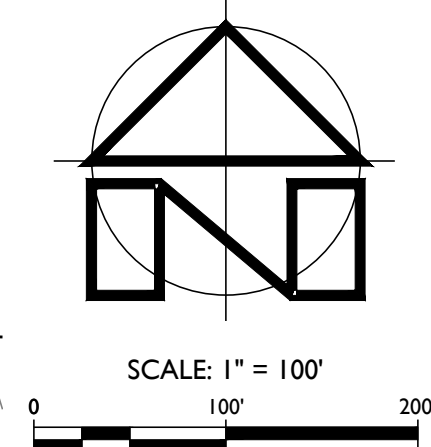
WAPPO LAND COMPANY LLC
VINEYARD DEVELOPMENT EROSION CONTROL PLAN
EROSION CONTROL PLAN

PREPARED UNDER THE DIRECTION OF:



DRAWN BY:	PowerCAD
CHECKED BY:	MRM
DATE:	MAY 10, 2019
REVISIONS:	BY:
1/7/2019	YMS
PLAN CHECK SUBMITTAL	
5/10/2019	YMS
PLAN CHECK RESPONSE	

JOB NUMBER:	08-152
FILE:	08-152ECP.DWG
ORIGINAL SIZE:	24" X 36"
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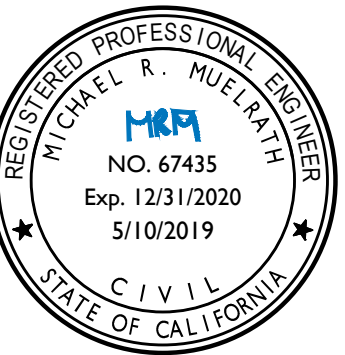


WAPATO LAND COMPANY LLC

VINEYARD DEVELOPMENT EROSION CONTROL PLAN

FENCING PLAN

PREPARED UNDER THE
DIRECTION OF:



DRAWN BY:
PowerCAD

CHECKED BY:
MRM

DATE: MAY 10, 2019

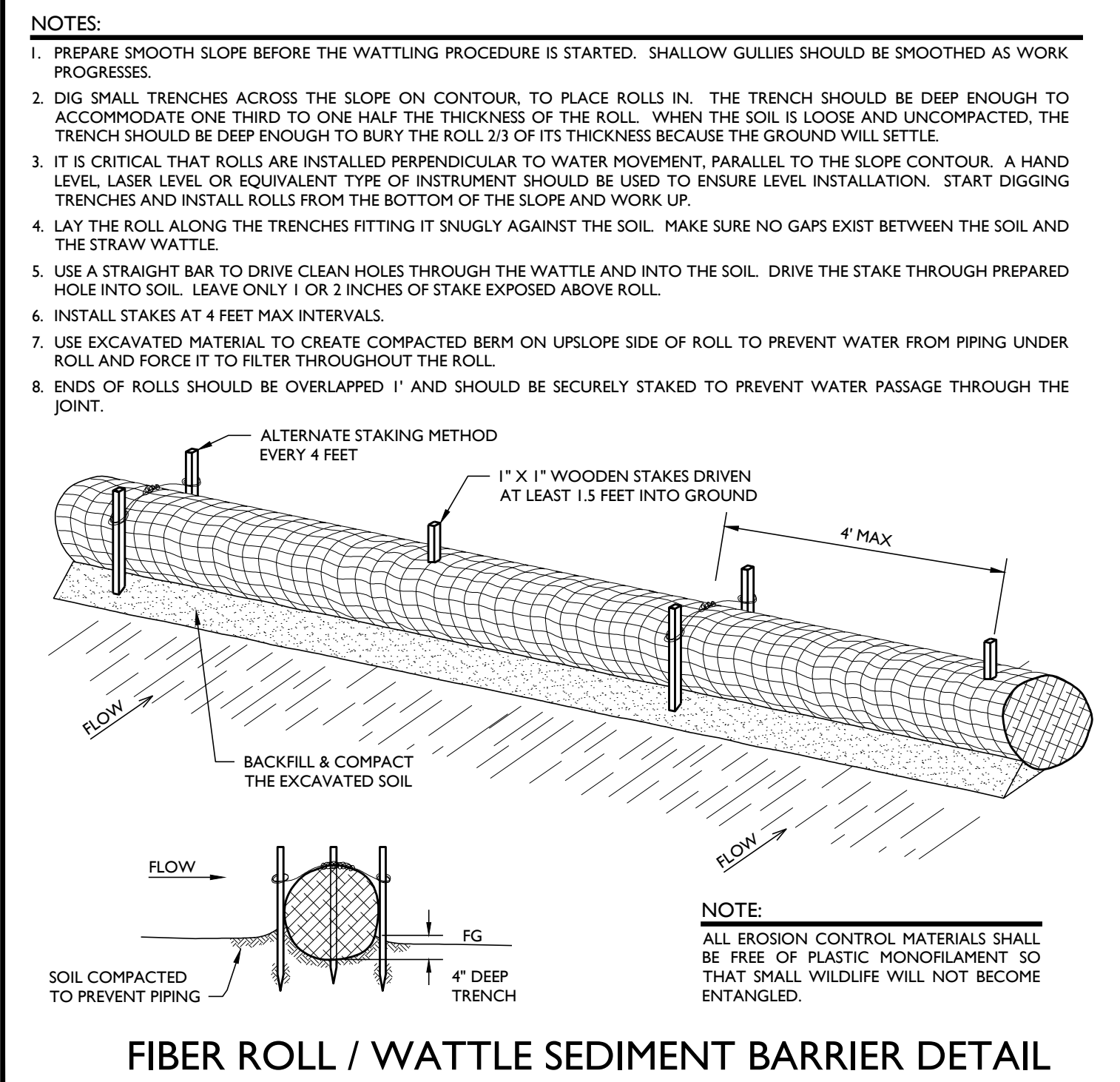
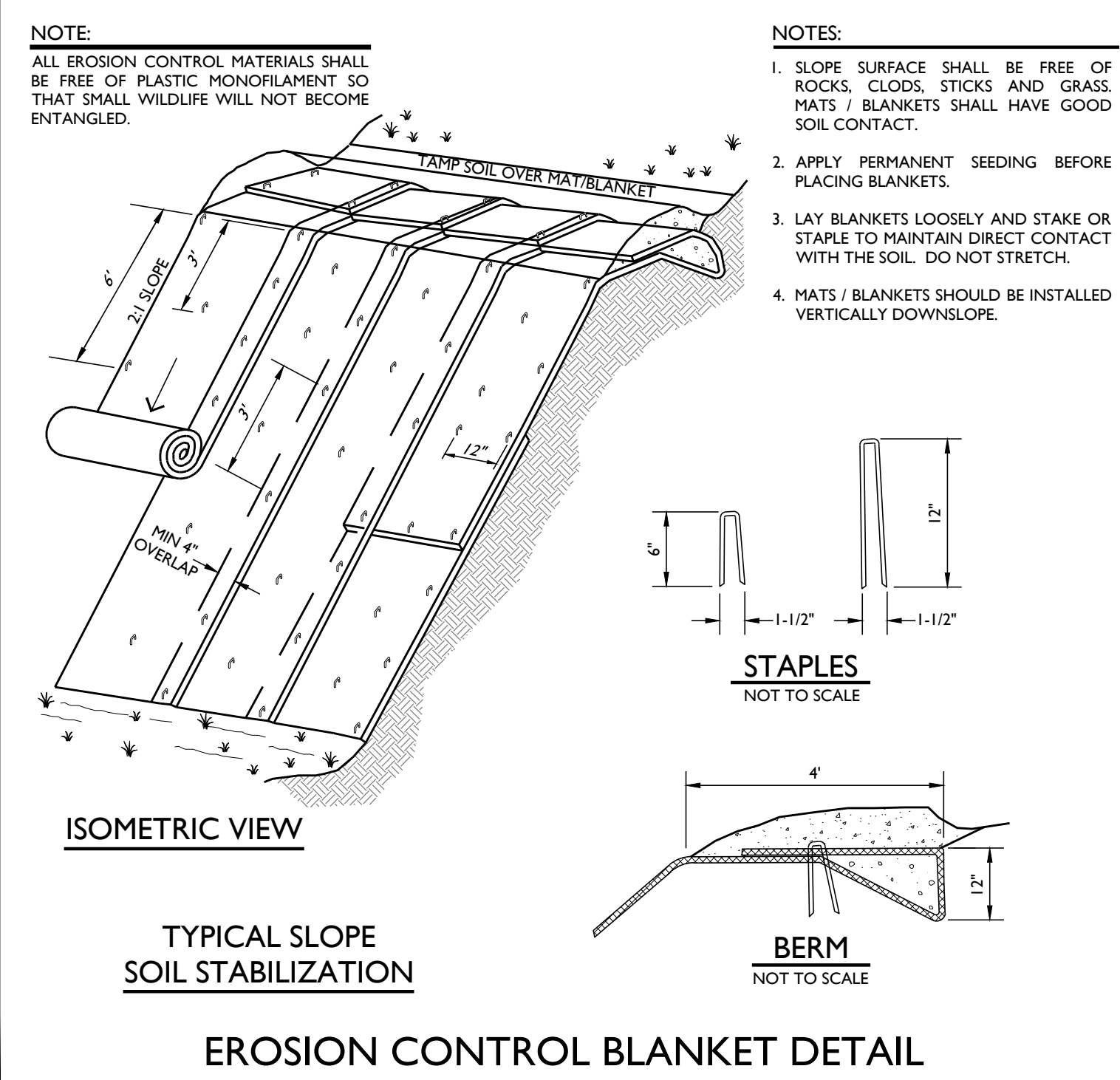
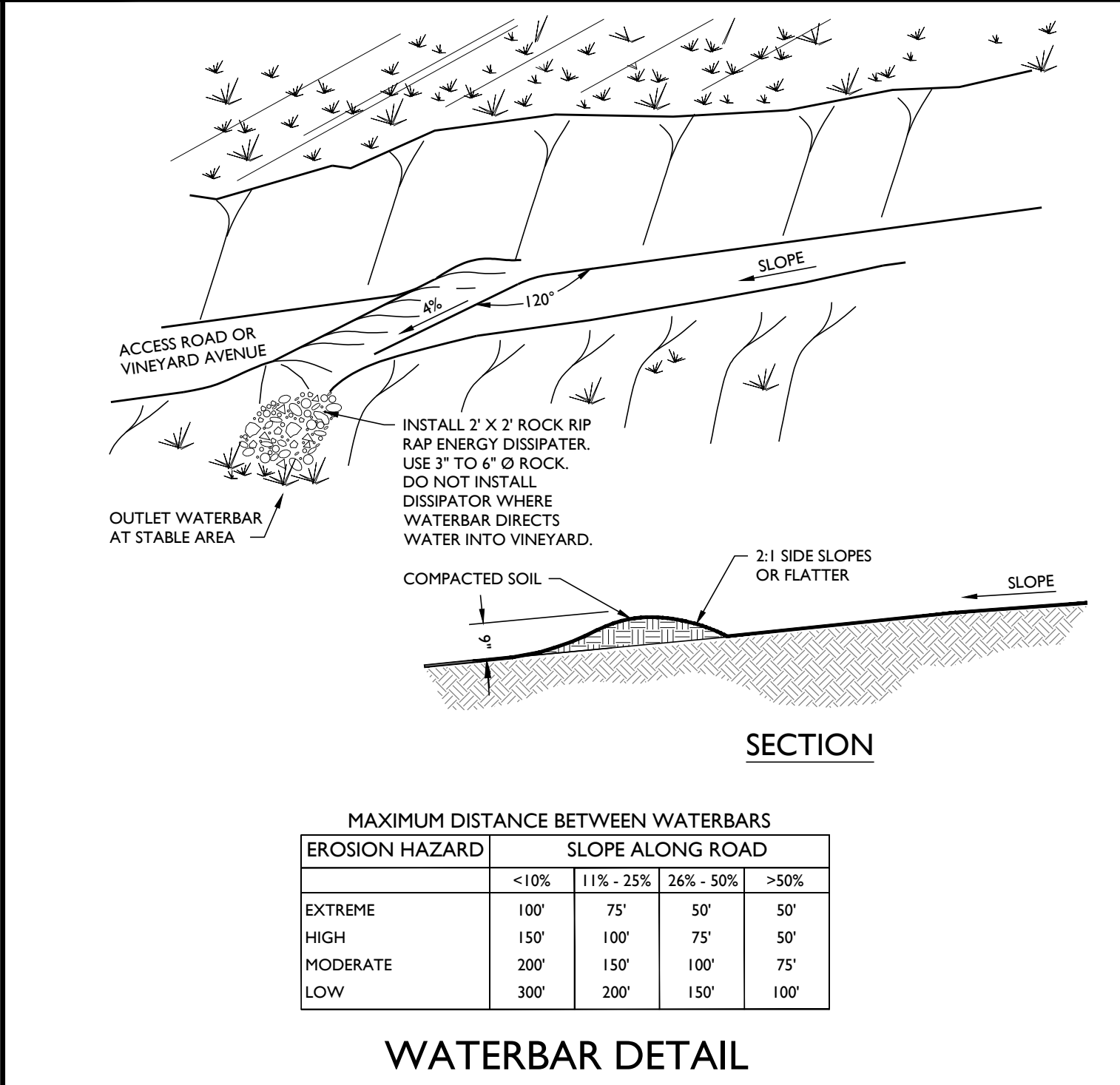
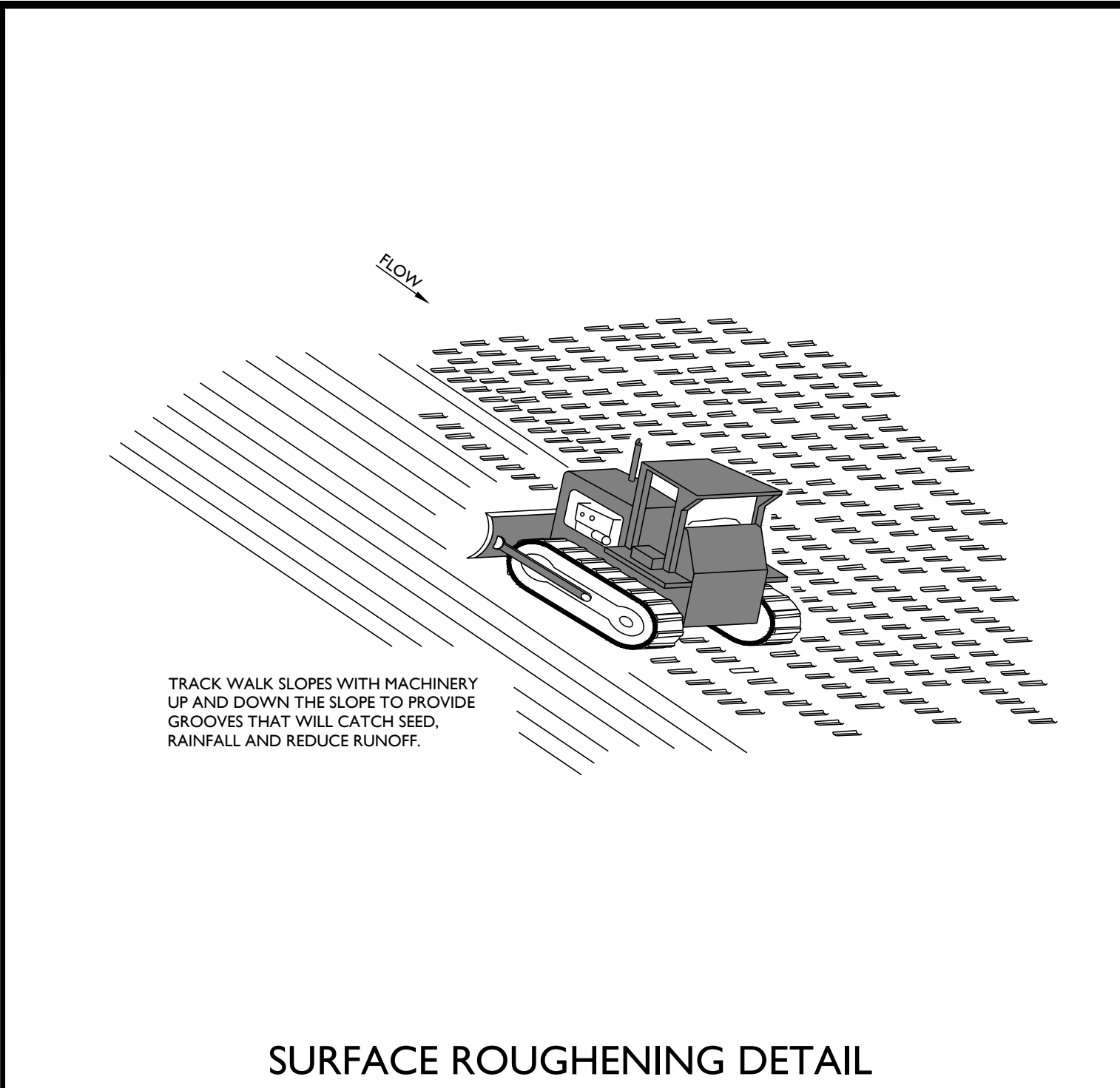
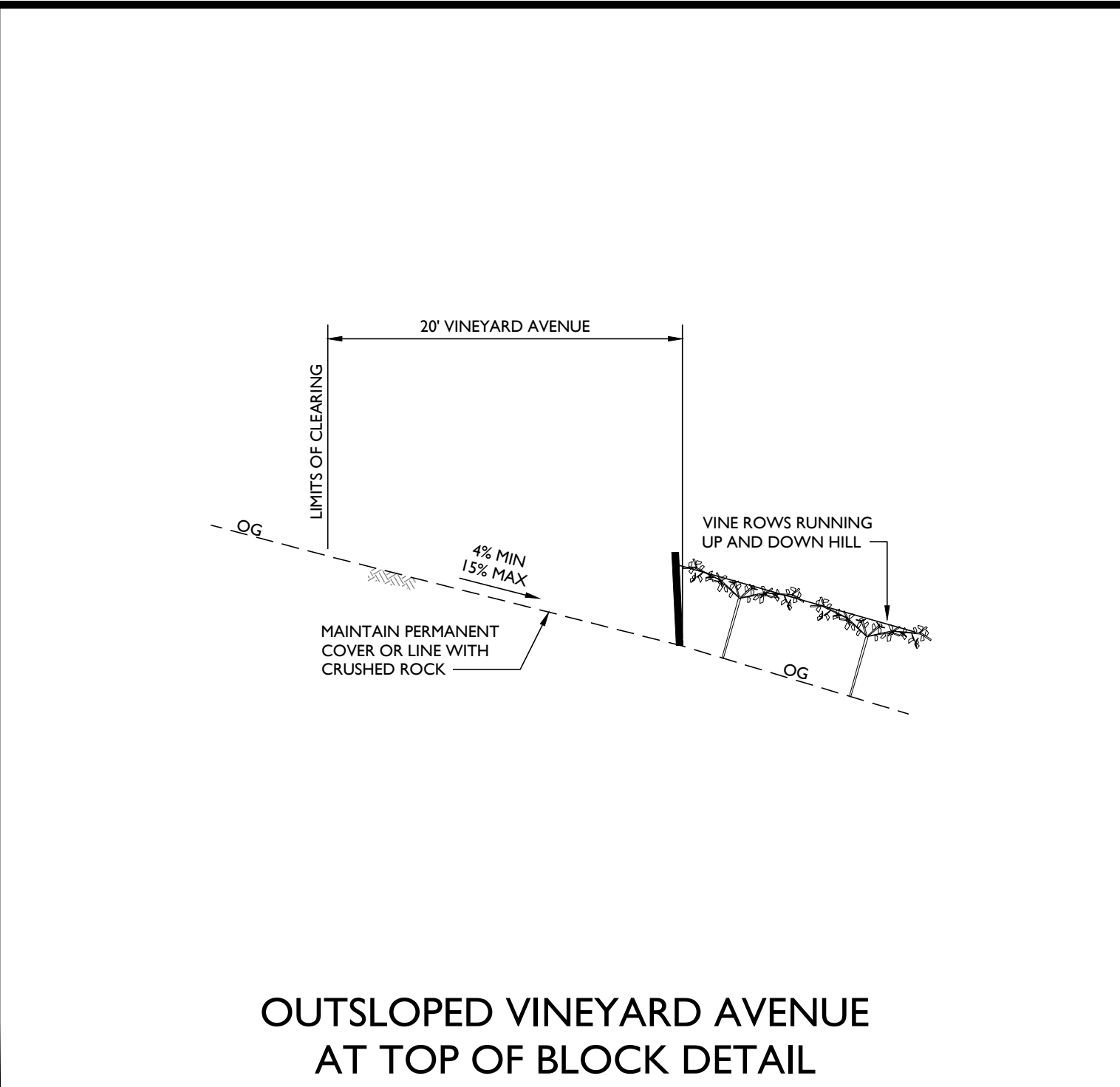
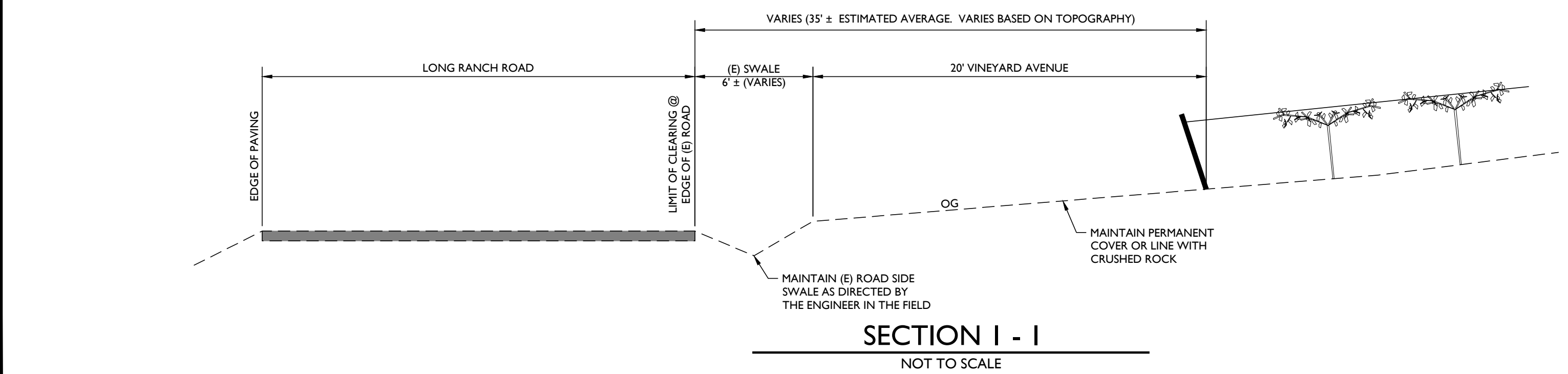
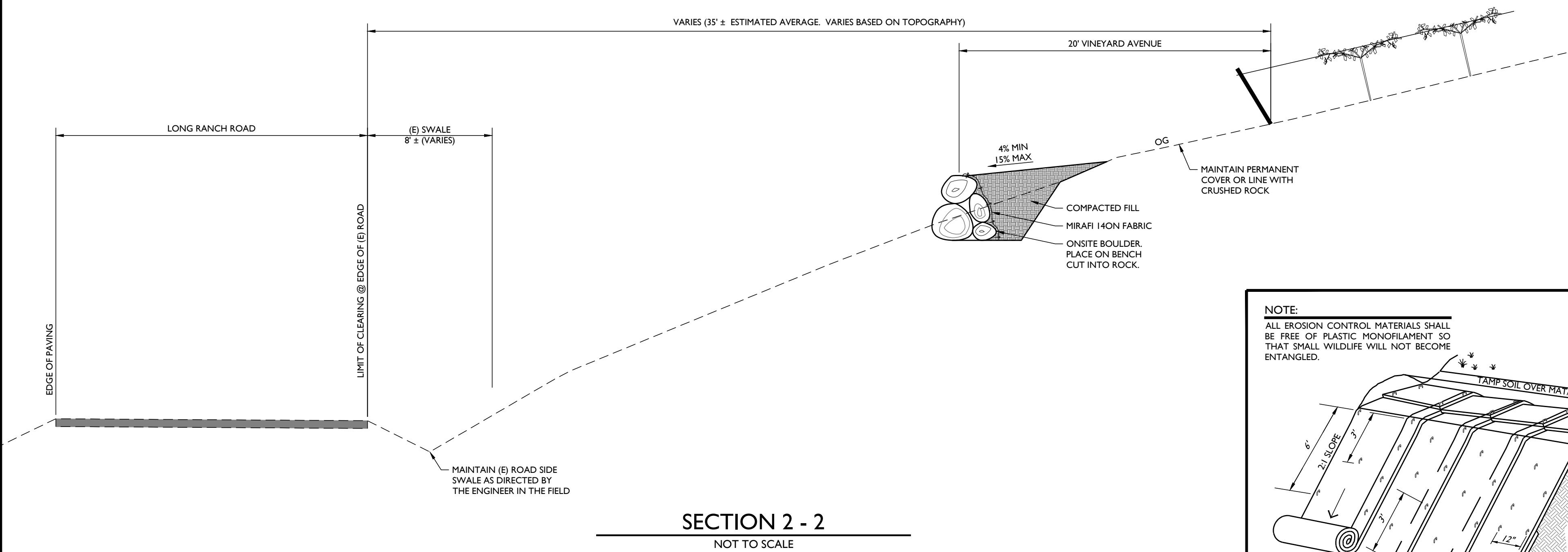
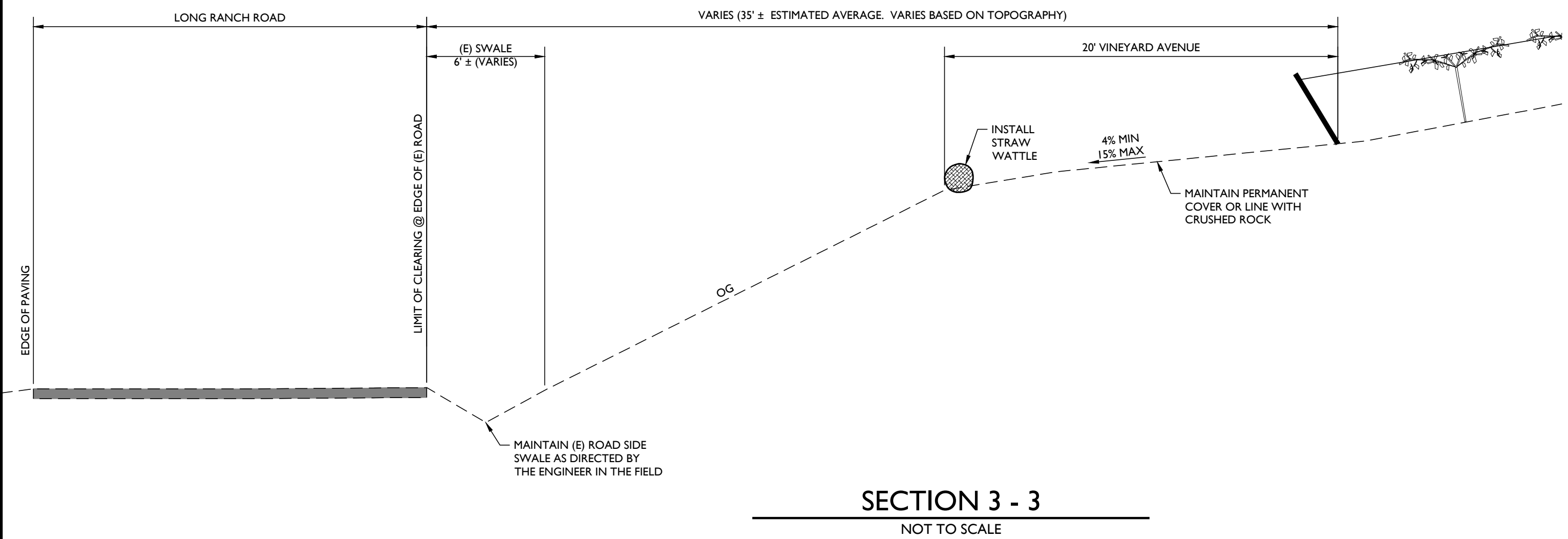
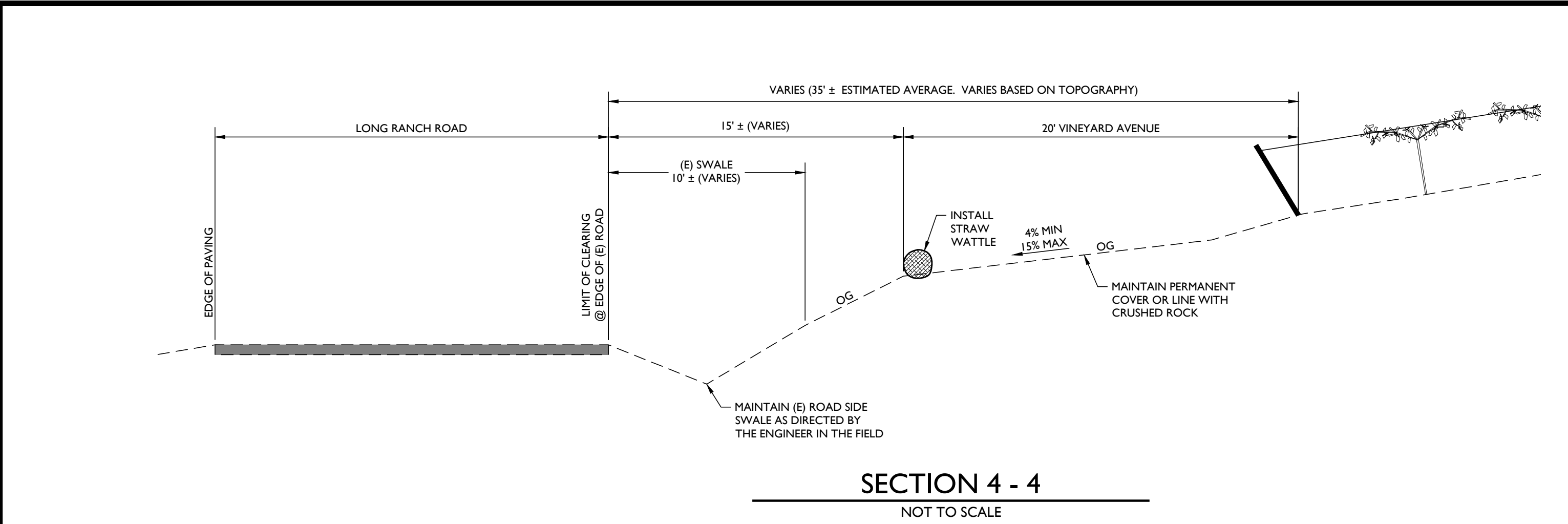
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OB NUMBER:
08-152

FILE:
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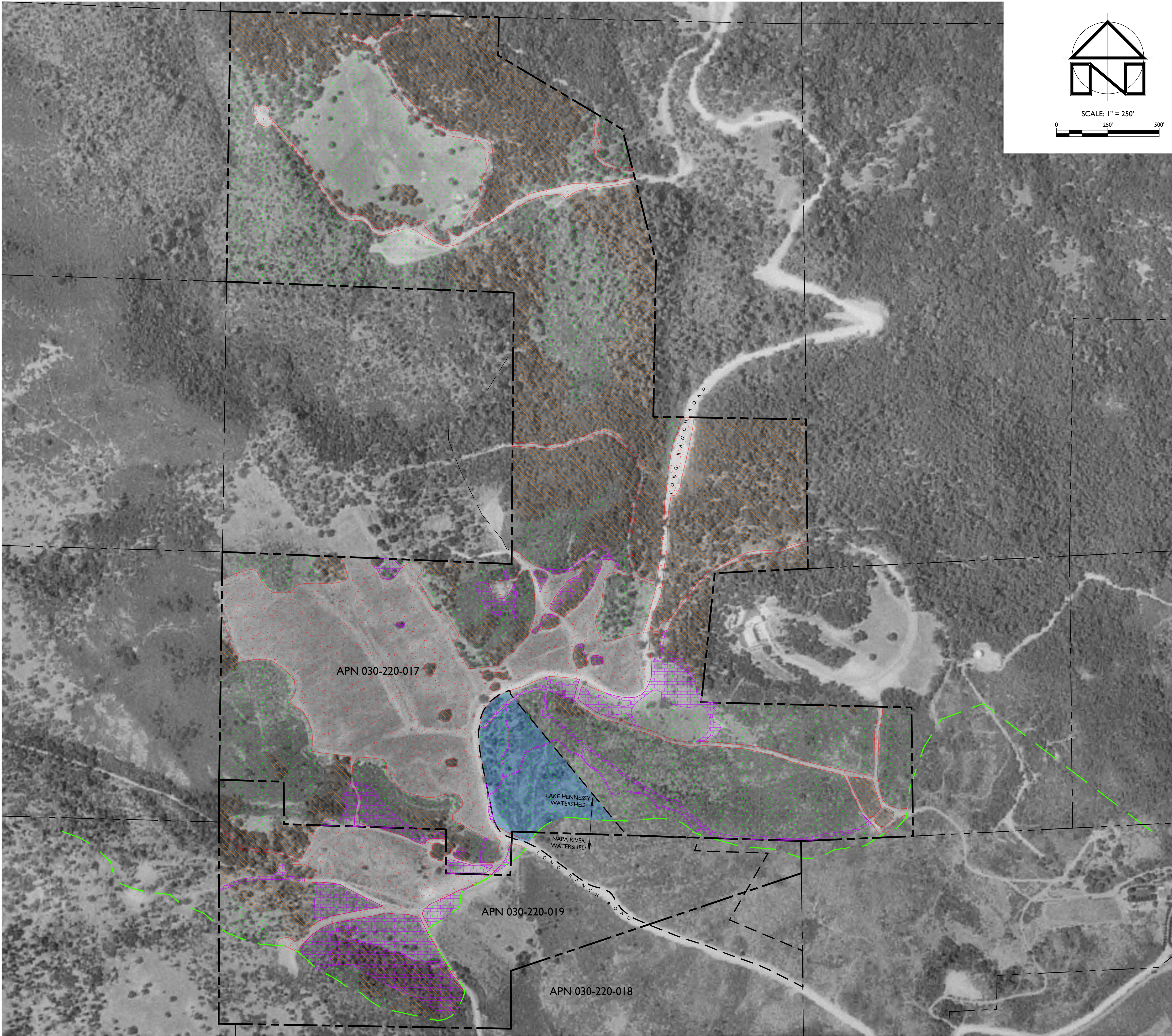
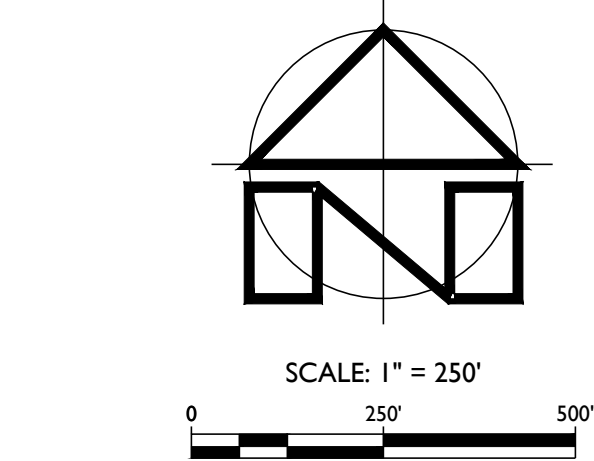
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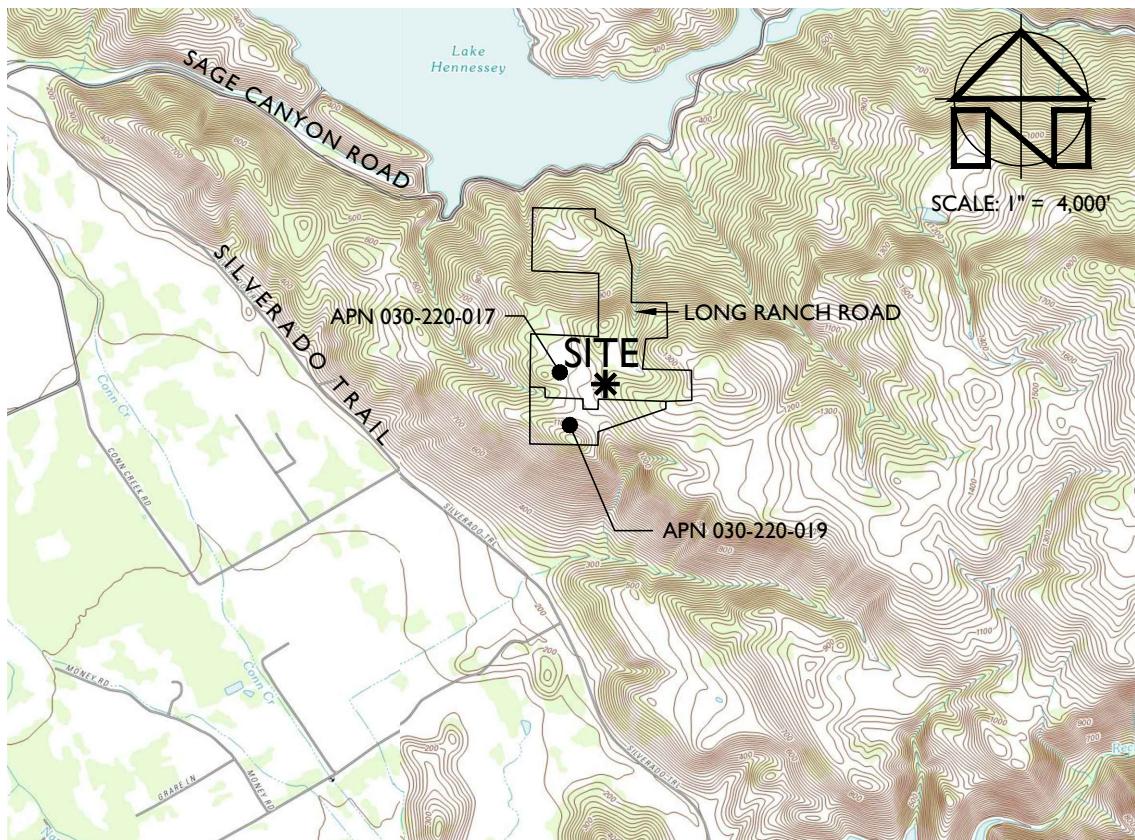
WAPPO LAND COMPANY LLC

VEGETATION RETENTION ANALYSIS - 1993



VEGETATION RETENTION ANALYSIS - 1993

SCALE: 1" = 250'



LOCATION MAP

SCALE: 1" = 4,000'

PROJECT INFORMATION:

PROPERTY OWNER & APPLICANT:

WAPPO LAND COMPANY LLC
141 LONG RANCH ROAD
SAINT HELENA, CA 94574

SITE ADDRESS:

LONG RANCH ROAD
SAINT HELENA, CA 94574

ASSESSOR'S PARCEL NUMBERS:

030-220-017 & -019

PARCEL SIZES:

175 ± & 45 ± ACRES RESPECTIVELY

ZONING:

AGRICULTURAL WATERSHED (AW)

NOTES:

1. FADED BACKGROUND REPRESENTS EXISTING TOPOGRAPHIC FEATURES. TOPOGRAPHIC INFORMATION WAS TAKEN FROM THE NAPA COUNTY GEOGRAPHIC INFORMATION SYSTEM DATABASE AND THE "ALTA / NSPS LAND TITLE SURVEY" PREPARED BY ALBION SURVEYS, INC., DATED FEBRUARY 18, 2016. APPLIED CIVIL ENGINEERING INCORPORATED ASSUMES NO LIABILITY REGARDING THE ACCURACY OR COMPLETENESS OF THE TOPOGRAPHIC INFORMATION.
2. AERIAL PHOTOGRAPH WAS OBTAINED FROM THE NAPA COUNTY GEOGRAPHIC INFORMATION SYSTEM DATABASE DIGITAL ORTHOPHOTO QUARTER QUAD CATALOG FROM 1993, DATED JUNE 1, 1993.
3. THE PROPERTY LINES SHOWN ON THESE PLANS DO NOT REPRESENT A BOUNDARY SURVEY. THEY ARE APPROXIMATE AND ARE PROVIDED FOR INFORMATIONAL PURPOSES ONLY.

PROPOSED CONDITIONS VEGETATION RETENTION ANALYSIS (APN 030-220-017)

	1993 CONDITIONS	REMOVED SINCE 1993	PROPOSED TO BE REMOVED	RETAINED	PERCENT RETAINED
TREES	56.4± ACRES	0.8± ACRES	-	55.6± ACRES	99%
BRUSH / GRASS	82.2± ACRES	4.7± ACRES	5.4± ACRES	72.1± ACRES	88%
IMPROVEMENTS	34.6± ACRES	-	0.9± ACRES	33.7± ACRES	-
TOTALS	173.2 ± ACRES	5.5± ACRES	6.3± ACRES	-	-

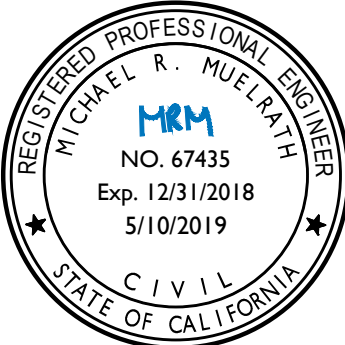
PROPOSED CONDITIONS VEGETATION RETENTION ANALYSIS (APN 030-220-019)

	1993 CONDITIONS	REMOVED SINCE 1993	PROPOSED TO BE REMOVED	RETAINED	PERCENT RETAINED
TREES	8.1± ACRES	2.9± ACRES	-	5.2± ACRES	64%
BRUSH / GRASS	6.7± ACRES	3.5± ACRES	0.1± ACRES	3.1± ACRES	46%
IMPROVEMENTS	6.1± ACRES	-	0.03± ACRES	-	-
TOTALS	20.9± ACRES	6.4± ACRES	0.13± ACRES	-	-

LEGEND:

- (E) TREES - 1993
- (E) BRUSH / GRASS - 1993
- (E) IMPROVEMENTS - 1993
- REMOVED SINCE 1993 FOR OTHER DEVELOPMENT
- PROPOSED TO BE REMOVED FOR VINEYARD

PREPARED UNDER THE
DIRECTION OF:



DRAWN BY:
PowerCAD

CHECKED BY:
MRM

DATE:
MAY 10, 2019

REVISIONS: BY:
1/30/2019 YMS
PERMIT SUBMITTAL
SET

5/10/2019 YMS
PLAN CHECK
RESPONSE

JOB NUMBER:
08-152

FILE:
08-152EXH-VEG.DWG

ORIGINAL SIZE:
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